MON-0301.ST25.txt
SEQUENCE LISTING

<110> Monell Chemical Senses Center
      Li, Xia
      Li, Weihua
      Reed, Danielle R.
      Bachmanov, Alexander A.
      Brand, Joseph G.

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<151> 2004-03-19

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<151> 2003-06-27

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ttcacctgta ctccatgtgg caaggatcag tggtccccag aaaaaagcac aacctgctta    1680

cctcgcaggc ccaagtttct ggcttggggg gagccagctg tgctgtcact tctcctgctg    1740

ctttgcctgg tgctgggcct gacactggct gccctggggc tctttgtcca ctactgggac    1800

agccctcttg ttcaggcctc aggtgggtca ctgttctgct ttggcctgat ctgcctaggc    1860

ctcttctgcc tcagtgtcct tctgttccca ggacgaccac gctctgccag ctgccttgcc    1920

caacaaccaa tggctcacct ccctctcaca ggctgcctga gcacactctt cctgcaagca    1980

gccgagatct ttgtggagtc tgagctgcca ctgagttggg caaactggct ctgcagctac    2040

cttcggggcc cctgggcttg gctggtggta ctgctggcca ctcttgtgga ggctgcacta    2100

tgtgcctggt acttgatggc tttccctcca gaggtggtga cagattggca ggtgctgccc    2160

acggaggtac tggaacactg ccgcatgcgt tcctgggtca gctgggctt ggtgcacatc    2220

accaatgcag tgttagcttt cctctgcttt ctgggcactt tcctggtaca gagccagcct    2280

ggtcgctata accgtgcccg tggcctcacc ttcgccatgc tagcttattt catcatctgg    2340

gtctcttttg tgcccctcct ggctaatgtg caggtggcct accagccagc tgtgcagatg    2400

ggtgctatct tattctgtgc cctgggcatc ctggccacct tccacctgcc caaatgctat    2460

gtacttctgt ggctgccaga gctcaacacc caggagttct tcctgggaag gagccccaag    2520

gaagcatcag atgggaatag tggtagtagt gaggcaactc ggggacacag tgaatga       2577
```

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<210>  11
<211>  2559
<212>  DNA
<213>  Homo sapiens

<400>  11
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gccccattgt gcctgtcaca gcaacttagg atgaaggggg actacgtgct ggggggggctg    120

ttcccctgg gcgaggccga ggaggctggc ctccgcagcc ggacacggcc agcagccct     180

gtgtgcacca ggttctcctc aaacggcctg ctctgggcac tggccatgaa aatggccgtg    240

gaggagatca caacaagtc ggatctgctg cccgggctgc gcctgggcta cgacctctt     300

gatacgtgct cggagcctgt ggtggccatg aagcccagcc tcatgttcct ggccaaggca    360

ggcagccgcg acatcgccgc ctactgcaac tacacgcagt accagccccg tgtgctggct    420

gtcatcgggc cccactcgtc agagctcgcc atggtcaccg gcaagttctt cagcttcttc    480

ctcatgcccc aggtcagcta cggtgctagc atggagctgc tgagcgcccg ggagaccttc    540

ccctccttct tccgcaccgt gcccagcgac cgtgtgcagc tgacggccgc cgcggagctg    600

ctgcaggagt cggctggaa ctgggtggcc gccctgggca gcgacgacga gtacggccgg    660

cagggcctga gcatcttctc ggccctggcc gcggcacgcg gcatctgcat cgcgcacgag    720

ggcctggtgc cgctgccccg tgccgatgac tcgcggctgg ggaaggtgca ggacgtcctg    780

caccaggtga accagagcag cgtgcaggtg gtgctgctgt cgcctccgt gcacgccgcc    840

cacgccctct tcaactacag catcagcagc aggctctcgc ccaaggtgtg ggtggccagc    900

gaggcctggc tgacctctga cctggtcatg gggctgcccg gcatggccca gatgggcacg    960
```

MON-0301.ST25.txt

```
gtgcttggct tcctccagag gggtgcccag ctgcacgagt tcccccagta cgtgaagacg    1020

cacctggccc tggccaccga cccggccttc tgctctgccc tgggcgagag ggagcagggt    1080

ctggaggagg acgtggtggg ccagcgctgc ccgcagtgtg actgcatcac gctgcagaac    1140

gtgagcgcag ggctaaatca ccaccagacg ttctctgtct acgcagctgt gtatagcgtg    1200

gcccaggccc tgcacaacac tcttcagtgc aacgcctcag ctgccccgc gcaggacccc     1260

gtgaagccct ggcagctcct ggagaacatg tacaacctga ccttccacgt gggcgggctg    1320

ccgctgcggt tcgacagcag cggaaacgtg gacatggagt acgacctgaa gctgtgggtg    1380

tggcagggct cagtgcccag gctccacgac gtgggcaggt tcaacggcag cctcaggaca    1440

gagcgcctga gatccgctg gcacacgtct gacaaccaga gcccgtgtc ccggtgctcg      1500

cggcagtgcc aggagggcca ggtgcgccgg gtcaaggggt tccactcctg ctgctacgac    1560

tgtgtggact gcgaggcggg cagctaccgg caaaacccag acgacatcgc ctgcaccttt    1620

tgtggccagg atgagtggtc cccggagcga agcacacgct gcttccgccg caggtctcgg    1680

ttcctggcat ggggcgagcc ggctgtgctg ctgctgctcc tgctgctgag cctggcgctg    1740

ggccttgtgc tggctgcttt ggggctgttc gttcaccatc gggacagccc actggttcag    1800

gcctcggggg ggcccctggc ctgctttggc ctggtgtgcc tgggcctggt ctgcctcagc    1860

gtcctcctgt tccctggcca gcccagccct gcccgatgcc tggcccagca gccttgtcc     1920

cacctcccgc tcacgggctg cctgagcaca ctcttcctgc aggcggccga gatcttcgtg    1980

gagtcagaac tgcctctgag ctgggcagac cggctgagtg gctgcctgcg ggggccctgg    2040

gcctggctgg tggtgctgct ggccatgctg gtggaggtcg cactgtgcac ctggtacctg    2100

gtggccttcc cgccggaggt ggtgacggac tggcacatgc tgcccacgga ggcgctggtg    2160

cactgccgca cacgctcctg ggtcagcttc ggcctagcgc acgccaccaa tgccacgctg    2220

gcctttctct gcttcctggg cactttcctg gtgcggagcc agccgggccg ctacaaccgt    2280

gcccgtggcc tcacctttgc catgctggcc tacttcatca cctgggtctc ctttgtgccc    2340

ctcctggcca atgtgcaggt ggtcctcagg cccgccgtgc agatgggcgc cctcctgctc    2400

tgtgtcctgg gcatcctggc tgccttccac ctgcccaggt gttacctgct catgcggcag    2460

ccagggctca acacccccga gttcttcctg ggagggggcc ctggggatgc ccaaggccag    2520

aatgacggga acacaggaaa tcaggggaaa catgagtga                           2559
```

<210> 12
<211> 852
<212> PRT
<213> Homo sapiens

<400> 12

```
Met Leu Gly Pro Ala Val Leu Gly Leu Ser Leu Trp Ala Leu Leu His
1               5                   10                  15


Pro Gly Thr Gly Ala Pro Leu Cys Leu Ser Gln Gln Leu Arg Met Lys
            20                  25                  30
```

MON-0301.ST25.txt

```
Gly Asp Tyr Val Leu Gly Gly Leu Phe Pro Leu Gly Glu Ala Glu Glu
    35                  40                  45

Ala Gly Leu Arg Ser Arg Thr Arg Pro Ser Ser Pro Val Cys Thr Arg
    50                  55                  60

Phe Ser Ser Asn Gly Leu Leu Trp Ala Leu Ala Met Lys Met Ala Val
65                  70                  75                  80

Glu Glu Ile Asn Asn Lys Ser Asp Leu Leu Pro Gly Leu Arg Leu Gly
                85                  90                  95

Tyr Asp Leu Phe Asp Thr Cys Ser Glu Pro Val Val Ala Met Lys Pro
                100                  105                 110

Ser Leu Met Phe Leu Ala Lys Ala Gly Ser Arg Asp Ile Ala Ala Tyr
            115                  120                  125

Cys Asn Tyr Thr Gln Tyr Gln Pro Arg Val Leu Ala Val Ile Gly Pro
    130                  135                  140

His Ser Ser Glu Leu Ala Met Val Thr Gly Lys Phe Phe Ser Phe Phe
145                  150                  155                  160

Leu Met Pro Gln Val Ser Tyr Gly Ala Ser Met Glu Leu Leu Ser Ala
                165                  170                  175

Arg Glu Thr Phe Pro Ser Phe Phe Arg Thr Val Pro Ser Asp Arg Val
                180                  185                  190

Gln Leu Thr Ala Ala Ala Glu Leu Leu Gln Glu Phe Gly Trp Asn Trp
                195                  200                  205

Val Ala Ala Leu Gly Ser Asp Asp Glu Tyr Gly Arg Gln Gly Leu Ser
    210                  215                  220

Ile Phe Ser Ala Leu Ala Ala Ala Arg Gly Ile Cys Ile Ala His Glu
225                  230                  235                  240

Gly Leu Val Pro Leu Pro Arg Ala Asp Asp Ser Arg Leu Gly Lys Val
                245                  250                  255

Gln Asp Val Leu His Gln Val Asn Gln Ser Ser Val Gln Val Val Leu
                260                  265                  270

Leu Phe Ala Ser Val His Ala Ala His Ala Leu Phe Asn Tyr Ser Ile
            275                  280                  285

Ser Ser Arg Leu Ser Pro Lys Val Trp Val Ala Ser Glu Ala Trp Leu
    290                  295                  300

Thr Ser Asp Leu Val Met Gly Leu Pro Gly Met Ala Gln Met Gly Thr
```

MON-0301.ST25.txt

305   310   315   320

Val Leu Gly Phe Leu Gln Arg Gly Ala Gln Leu His Glu Phe Pro Gln
                325   330   335

Tyr Val Lys Thr His Leu Ala Leu Ala Thr Asp Pro Ala Phe Cys Ser
            340   345   350

Ala Leu Gly Glu Arg Glu Gln Gly Leu Glu Glu Asp Val Val Gly Gln
        355   360   365

Arg Cys Pro Gln Cys Asp Cys Ile Thr Leu Gln Asn Val Ser Ala Gly
    370   375   380

Leu Asn His His Gln Thr Phe Ser Val Tyr Ala Ala Val Tyr Ser Val
385   390   395   400

Ala Gln Ala Leu His Asn Thr Leu Gln Cys Asn Ala Ser Gly Cys Pro
                405   410   415

Ala Gln Asp Pro Val Lys Pro Trp Gln Leu Leu Glu Asn Met Tyr Asn
            420   425   430

Leu Thr Phe His Val Gly Gly Leu Pro Leu Arg Phe Asp Ser Ser Gly
            435   440   445

Asn Val Asp Met Glu Tyr Asp Leu Lys Leu Trp Val Trp Gln Gly Ser
    450   455   460

Val Pro Arg Leu His Asp Val Gly Arg Phe Asn Gly Ser Leu Arg Thr
465   470   475   480

Glu Arg Leu Lys Ile Arg Trp His Thr Ser Asp Asn Gln Lys Pro Val
                485   490   495

Ser Arg Cys Ser Arg Gln Cys Gln Glu Gly Gln Val Arg Arg Val Lys
            500   505   510

Gly Phe His Ser Cys Cys Tyr Asp Cys Val Asp Cys Glu Ala Gly Ser
            515   520   525

Tyr Arg Gln Asn Pro Asp Asp Ile Ala Cys Thr Phe Cys Gly Gln Asp
    530   535   540

Glu Trp Ser Pro Glu Arg Ser Thr Arg Cys Phe Arg Arg Arg Ser Arg
545   550   555   560

Phe Leu Ala Trp Gly Glu Pro Ala Val Leu Leu Leu Leu Leu Leu Leu
                565   570   575

Ser Leu Ala Leu Gly Leu Val Leu Ala Ala Leu Gly Leu Phe Val His
            580   585   590

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MON-0301.ST25.txt

```
His Arg Asp Ser Pro Leu Val Gln Ala Ser Gly Gly Pro Leu Ala Cys
    595                 600                 605

Phe Gly Leu Val Cys Leu Gly Leu Val Cys Leu Ser Val Leu Leu Phe
    610                 615                 620

Pro Gly Gln Pro Ser Pro Ala Arg Cys Leu Ala Gln Gln Pro Leu Ser
625                 630                 635                 640

His Leu Pro Leu Thr Gly Cys Leu Ser Thr Leu Phe Leu Gln Ala Ala
                645                 650                 655

Glu Ile Phe Val Glu Ser Glu Leu Pro Leu Ser Trp Ala Asp Arg Leu
                660                 665                 670

Ser Gly Cys Leu Arg Gly Pro Trp Ala Trp Leu Val Val Leu Leu Ala
            675                 680                 685

Met Leu Val Glu Val Ala Leu Cys Thr Trp Tyr Leu Val Ala Phe Pro
    690                 695                 700

Pro Glu Val Val Thr Asp Trp His Met Leu Pro Thr Glu Ala Leu Val
705                 710                 715                 720

His Cys Arg Thr Arg Ser Trp Val Ser Phe Gly Leu Ala His Ala Thr
                725                 730                 735

Asn Ala Thr Leu Ala Phe Leu Cys Phe Leu Gly Thr Phe Leu Val Arg
                740                 745                 750

Ser Gln Pro Gly Arg Tyr Asn Arg Ala Arg Gly Leu Thr Phe Ala Met
            755                 760                 765

Leu Ala Tyr Phe Ile Thr Trp Val Ser Phe Val Pro Leu Leu Ala Asn
    770                 775                 780

Val Gln Val Val Leu Arg Pro Ala Val Gln Met Gly Ala Leu Leu Leu
785                 790                 795                 800

Cys Val Leu Gly Ile Leu Ala Ala Phe His Leu Pro Arg Cys Tyr Leu
            805                 810                 815

Leu Met Arg Gln Pro Gly Leu Asn Thr Pro Glu Phe Phe Leu Gly Gly
            820                 825                 830

Gly Pro Gly Asp Ala Gln Gly Gln Asn Asp Gly Asn Thr Gly Asn Gln
            835                 840                 845

Gly Lys His Glu
    850
```

<210> 13

MON-0301.ST25.txt

```
<211>  858
<212>  PRT
<213>  Mus musculus

<400>  13
```

Met Pro Ala Leu Ala Ile Met Gly Leu Ser Leu Ala Ala Phe Leu Glu
1   5   10   15

Leu Gly Met Gly Ala Ser Leu Cys Leu Ser Gln Gln Phe Lys Ala Gln
                20   25   30

Gly Asp Tyr Ile Leu Gly Gly Leu Phe Pro Leu Gly Ser Thr Glu Glu
            35   40   45

Ala Thr Leu Asn Gln Arg Thr Gln Pro Asn Ser Ile Pro Cys Asn Arg
    50   55   60

Phe Ser Pro Leu Gly Leu Phe Leu Ala Met Ala Met Lys Met Ala Val
65   70   75   80

Glu Glu Ile Asn Asn Gly Ser Ala Leu Leu Pro Gly Leu Arg Leu Gly
                85   90   95

Tyr Asp Leu Phe Asp Thr Cys Ser Glu Pro Val Val Thr Met Lys Ser
            100   105   110

Ser Leu Met Phe Leu Ala Lys Val Gly Ser Gln Ser Ile Ala Ala Tyr
        115   120   125

Cys Asn Tyr Thr Gln Tyr Gln Pro Arg Val Leu Ala Val Ile Gly Pro
    130   135   140

His Ser Ser Glu Leu Ala Leu Ile Thr Gly Lys Phe Phe Ser Phe Phe
145   150   155   160

Leu Met Pro Gln Val Ser Tyr Ser Ala Ser Met Asp Arg Leu Ser Asp
                165   170   175

Arg Glu Thr Phe Pro Ser Phe Phe Arg Thr Val Pro Ser Asp Arg Val
            180   185   190

Gln Leu Gln Ala Val Val Thr Leu Leu Gln Asn Phe Ser Trp Asn Trp
        195   200   205

Val Ala Ala Leu Gly Ser Asp Asp Asp Tyr Gly Arg Glu Gly Leu Ser
    210   215   220

Ile Phe Ser Ser Leu Ala Asn Ala Arg Gly Ile Cys Ile Ala His Glu
225   230   235   240

Gly Leu Val Pro Gln His Asp Thr Ser Gly Gln Gln Leu Gly Lys Val
                245   250   255

MON-0301.ST25.txt

```
Leu Asp Val Leu Arg Gln Val Asn Gln Ser Lys Val Gln Val Val Val
        260                 265             270

Leu Phe Ala Ser Ala Arg Ala Val Tyr Ser Leu Phe Ser Tyr Ser Ile
        275             280             285

His His Gly Leu Ser Pro Lys Val Trp Val Ala Ser Glu Ser Trp Leu
290             295             300

Thr Ser Asp Leu Val Met Thr Leu Pro Asn Ile Ala Arg Val Gly Thr
305             310             315             320

Val Leu Gly Phe Leu Gln Arg Gly Ala Leu Leu Pro Glu Phe Ser His
            325             330             335

Tyr Val Glu Thr His Leu Ala Leu Ala Ala Asp Pro Ala Phe Cys Ala
        340             345             350

Ser Leu Asn Ala Glu Leu Asp Leu Glu Glu His Val Met Gly Gln Arg
        355             360             365

Cys Pro Arg Cys Asp Asp Ile Met Leu Gln Asn Leu Ser Ser Gly Leu
    370             375             380

Leu Gln Asn Leu Ser Ala Gly Gln Leu His His Gln Ile Phe Ala Thr
385             390             395             400

Tyr Ala Ala Val Tyr Ser Val Ala Gln Ala Leu His Asn Thr Leu Gln
            405             410             415

Cys Asn Val Ser His Cys His Val Ser Glu His Val Leu Pro Trp Gln
            420             425             430

Leu Leu Glu Asn Met Tyr Asn Met Ser Phe His Ala Arg Asp Leu Thr
        435             440             445

Leu Gln Phe Asp Ala Glu Gly Asn Val Asp Met Glu Tyr Asp Leu Lys
    450             455             460

Met Trp Val Trp Gln Ser Pro Thr Pro Val Leu His Thr Val Gly Thr
465             470             475             480

Phe Asn Gly Thr Leu Gln Leu Gln Gln Ser Lys Met Tyr Trp Pro Gly
            485             490             495

Asn Gln Val Pro Val Ser Gln Cys Ser Arg Gln Cys Lys Asp Gly Gln
        500             505             510

Val Arg Arg Val Lys Gly Phe His Ser Cys Cys Tyr Asp Cys Val Asp
        515             520             525

Cys Lys Ala Gly Ser Tyr Arg Lys His Pro Asp Asp Phe Thr Cys Thr
    530             535             540
```

MON-0301.ST25.txt

Pro Cys Asn Gln Asp Gln Trp Ser Pro Glu Lys Ser Thr Ala Cys Leu
545   550   555   560

Pro Arg Arg Pro Lys Phe Leu Ala Trp Gly Glu Pro Val Val Leu Ser
                565   570   575

Leu Leu Leu Leu Leu Cys Leu Val Leu Gly Leu Ala Leu Ala Ala Leu
            580   585   590

Gly Leu Ser Val His His Trp Asp Ser Pro Leu Val Gln Ala Ser Gly
        595   600   605

Gly Ser Gln Phe Cys Phe Gly Leu Ile Cys Leu Gly Leu Phe Cys Leu
    610   615   620

Ser Val Leu Leu Phe Pro Gly Arg Pro Ser Ser Ala Ser Cys Leu Ala
625   630   635   640

Gln Gln Pro Met Ala His Leu Pro Leu Thr Gly Cys Leu Ser Thr Leu
            645   650   655

Phe Leu Gln Ala Ala Glu Thr Phe Val Glu Ser Glu Leu Pro Leu Ser
            660   665   670

Trp Ala Asn Trp Leu Cys Ser Tyr Leu Arg Gly Leu Trp Ala Trp Leu
        675   680   685

Val Val Leu Leu Ala Thr Phe Val Glu Ala Ala Leu Cys Ala Trp Tyr
    690   695   700

Leu Ile Ala Phe Pro Pro Glu Val Val Thr Asp Trp Ser Val Leu Pro
705   710   715   720

Thr Glu Val Leu Glu His Cys His Val Arg Ser Trp Val Ser Leu Gly
            725   730   735

Leu Val His Ile Thr Asn Ala Met Leu Ala Phe Leu Cys Phe Leu Gly
        740   745   750

Thr Phe Leu Val Gln Ser Gln Pro Gly Arg Tyr Asn Arg Ala Arg Gly
    755   760   765

Leu Thr Phe Ala Met Leu Ala Tyr Phe Ile Thr Trp Val Ser Phe Val
770   775   780

Pro Leu Leu Ala Asn Val Gln Val Ala Tyr Gln Pro Ala Val Gln Met
785   790   795   800

Gly Ala Ile Leu Val Cys Ala Leu Gly Ile Leu Val Thr Phe His Leu
            805   810   815

MON-0301.ST25.txt

Pro Lys Cys Tyr Val Leu Leu Trp Leu Pro Lys Leu Asn Thr Gln Glu
            820   825   830

Phe Phe Leu Gly Arg Asn Ala Lys Lys Ala Ala Asp Glu Asn Ser Gly
            835   840   845

Gly Gly Glu Ala Ala Gln Gly His Asn Glu
            850   855

<210>   14
<211>   858
<212>   PRT
<213>   Rattus rattus

<400>   14

Met Pro Gly Leu Ala Ile Leu Gly Leu Ser Leu Ala Ala Phe Leu Glu
1   5   10   15

Leu Gly Met Gly Ser Ser Leu Cys Leu Ser Gln Gln Phe Lys Ala Gln
            20   25   30

Gly Asp Tyr Ile Leu Gly Gly Leu Phe Pro Leu Gly Thr Thr Glu Glu
            35   40   45

Ala Thr Leu Asn Gln Arg Thr Gln Pro Asn Gly Ile Leu Cys Thr Arg
    50   55   60

Phe Ser Pro Leu Gly Leu Phe Leu Ala Met Ala Met Lys Met Ala Val
65   70   75   80

Glu Glu Ile Asn Asn Gly Ser Ala Leu Leu Pro Gly Leu Arg Leu Gly
                85   90   95

Tyr Asp Leu Phe Asp Thr Cys Ser Glu Pro Val Val Thr Met Lys Pro
            100   105   110

Ser Leu Met Phe Met Ala Lys Val Gly Ser Gln Ser Ile Ala Ala Tyr
            115   120   125

Cys Asn Tyr Thr Gln Tyr Gln Pro Arg Val Leu Ala Val Ile Gly Pro
            130   135   140

His Ser Ser Glu Leu Ala Leu Ile Thr Gly Lys Phe Phe Ser Phe Phe
145   150   155   160

Leu Met Pro Gln Val Ser Tyr Ser Ala Ser Met Asp Arg Leu Ser Asp
                165   170   175

Arg Glu Thr Phe Pro Ser Phe Phe Arg Thr Val Pro Ser Asp Arg Val
            180   185   190

Gln Leu Gln Ala Val Val Thr Leu Leu Gln Asn Phe Ser Trp Asn Trp
            195   200   205

MON-0301.ST25.txt

```
Val Ala Ala Leu Gly Ser Asp Asp Asp Tyr Gly Arg Glu Gly Leu Ser
    210             215             220

Ile Phe Ser Gly Leu Ala Asn Ser Arg Gly Ile Cys Ile Ala His Glu
225             230             235             240

Gly Leu Val Pro Gln His Asp Thr Ser Gly Gln Gln Leu Gly Lys Val
            245             250             255

Val Asp Val Leu Arg Gln Val Asn Gln Ser Lys Val Gln Val Val Val
            260             265             270

Leu Phe Ala Ser Ala Arg Ala Val Tyr Ser Leu Phe Ser Tyr Ser Ile
        275             280             285

Leu His Asp Leu Ser Pro Lys Val Trp Val Ala Ser Glu Ser Trp Leu
    290             295             300

Thr Ser Asp Leu Val Met Thr Leu Pro Asn Ile Ala Arg Val Gly Thr
305             310             315             320

Val Leu Gly Phe Leu Gln Arg Gly Ala Leu Leu Pro Glu Phe Ser His
            325             330             335

Tyr Val Glu Thr Arg Leu Ala Leu Ala Ala Asp Pro Thr Phe Cys Ala
        340             345             350

Ser Leu Lys Ala Glu Leu Asp Leu Glu Glu Arg Val Met Gly Pro Arg
        355             360             365

Cys Ser Gln Cys Asp Tyr Ile Met Leu Gln Asn Leu Ser Ser Gly Leu
    370             375             380

Met Gln Asn Leu Ser Ala Gly Gln Leu His His Gln Ile Phe Ala Thr
385             390             395             400

Tyr Ala Ala Val Tyr Ser Val Ala Gln Ala Leu His Asn Thr Leu Gln
            405             410             415

Cys Asn Val Ser His Cys His Thr Ser Glu Pro Val Gln Pro Trp Gln
            420             425             430

Leu Leu Glu Asn Met Tyr Asn Met Ser Phe Arg Ala Arg Asp Leu Thr
        435             440             445

Leu Gln Phe Asp Ala Lys Gly Ser Val Asp Met Glu Tyr Asp Leu Lys
    450             455             460

Met Trp Val Trp Gln Ser Pro Thr Pro Val Leu His Thr Val Gly Thr
465             470             475             480

Phe Asn Gly Thr Leu Gln Leu Gln His Ser Lys Met Tyr Trp Pro Gly
```

Asn Gln Val Pro Val Ser Gln Cys Ser Arg Gln Cys Lys Asp Gly Gln
            500   505   510

Val Arg Arg Val Lys Gly Phe His Ser Cys Cys Tyr Asp Cys Val Asp
        515   520   525

Cys Lys Ala Gly Ser Tyr Arg Lys His Pro Asp Asp Phe Thr Cys Thr
    530   535   540

Pro Cys Gly Lys Asp Gln Trp Ser Pro Glu Lys Ser Thr Thr Cys Leu
545   550   555   560

Pro Arg Arg Pro Lys Phe Leu Ala Trp Gly Glu Pro Ala Val Leu Ser
            565   570   575

Leu Leu Leu Leu Leu Cys Leu Val Leu Gly Leu Thr Leu Ala Ala Leu
            580   585   590

Gly Leu Phe Val His Tyr Trp Asp Ser Pro Leu Val Gln Ala Ser Gly
        595   600   605

Gly Ser Leu Phe Cys Phe Gly Leu Ile Cys Leu Gly Leu Phe Cys Leu
        610   615   620

Ser Val Leu Leu Phe Pro Gly Arg Pro Arg Ser Ala Ser Cys Leu Ala
625   630   635   640

Gln Gln Pro Met Ala His Leu Pro Leu Thr Gly Cys Leu Ser Thr Leu
            645   650   655

Phe Leu Gln Ala Ala Glu Ile Phe Val Glu Ser Glu Leu Pro Leu Ser
            660   665   670

Trp Ala Asn Trp Leu Cys Ser Tyr Leu Arg Gly Pro Trp Ala Trp Leu
        675   680   685

Val Val Leu Leu Ala Thr Leu Val Glu Ala Ala Leu Cys Ala Trp Tyr
    690   695   700

Leu Met Ala Phe Pro Pro Glu Val Val Thr Asp Trp Gln Val Leu Pro
705   710   715   720

Thr Glu Val Leu Glu His Cys Arg Met Arg Ser Trp Val Ser Leu Gly
            725   730   735

Leu Val His Ile Thr Asn Ala Val Leu Ala Phe Leu Cys Phe Leu Gly
        740   745   750

Thr Phe Leu Val Gln Ser Gln Pro Gly Arg Tyr Asn Arg Ala Arg Gly
        755   760   765

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MON-0301.ST25.txt

```
Leu Thr Phe Ala Met Leu Ala Tyr Phe Ile Ile Trp Val Ser Phe Val
    770             775             780
```

```
Pro Leu Leu Ala Asn Val Gln Val Ala Tyr Gln Pro Ala Val Gln Met
785             790             795             800
```

```
Gly Ala Ile Leu Phe Cys Ala Leu Gly Ile Leu Ala Thr Phe His Leu
            805             810             815
```

```
Pro Lys Cys Tyr Val Leu Leu Trp Leu Pro Glu Leu Asn Thr Gln Glu
            820             825             830
```

```
Phe Phe Leu Gly Arg Ser Pro Lys Glu Ala Ser Asp Gly Asn Ser Gly
        835             840             845
```

```
Ser Ser Glu Ala Thr Arg Gly His Ser Glu
    850             855
```

```
<210>  15
<211>  842
<212>  PRT
<213>  Mus musculus
```

```
<400>  15
```

```
Met Leu Phe Trp Ala Ala His Leu Leu Leu Ser Leu Gln Leu Ala Val
1           5               10              15
```

```
Ala Tyr Cys Trp Ala Phe Ser Cys Gln Arg Thr Glu Ser Ser Pro Gly
            20              25              30
```

```
Phe Ser Leu Pro Gly Asp Phe Leu Leu Ala Gly Leu Phe Ser Leu His
        35              40              45
```

```
Ala Asp Cys Leu Gln Val Arg His Arg Pro Leu Val Thr Ser Cys Asp
    50              55              60
```

```
Arg Ser Asp Ser Phe Asn Gly His Gly Tyr His Leu Phe Gln Ala Met
65              70              75              80
```

```
Arg Phe Thr Val Glu Glu Ile Asn Asn Ser Thr Ala Leu Leu Pro Asn
            85              90              95
```

```
Ile Thr Leu Gly Tyr Glu Leu Tyr Asp Val Cys Ser Glu Ser Ser Asn
            100             105             110
```

```
Val Tyr Ala Thr Leu Arg Val Leu Ala Gln Gln Gly Thr Gly His Leu
        115             120             125
```

```
Glu Met Gln Arg Asp Leu Arg Asn His Ser Ser Lys Val Val Ala Leu
    130             135             140
```

```
Ile Gly Pro Asp Asn Thr Asp His Ala Val Thr Thr Ala Ala Leu Leu
145             150             155             160
```

MON-0301.ST25.txt

Ser Pro Phe Leu Met Pro Leu Val Ser Tyr Glu Ala Ser Ser Val Ile
　　　　　　　　　165　　　　　　　　　　　170　　　　　　　　　　175

Leu Ser Gly Lys Arg Lys Phe Pro Ser Phe Leu Arg Thr Ile Pro Ser
　　　　　　　180　　　　　　　　　185　　　　　　　　　190

Asp Lys Tyr Gln Val Glu Val Ile Val Arg Leu Leu Gln Ser Phe Gly
　　　　　195　　　　　　　　　200　　　　　　　　　205

Trp Val Trp Ile Ser Leu Val Gly Ser Tyr Gly Asp Tyr Gly Gln Leu
210　　　　　　　　　215　　　　　　　　　220

Gly Val Gln Ala Leu Glu Glu Leu Ala Thr Pro Arg Gly Ile Cys Val
225　　　　　　　　　230　　　　　　　　　235　　　　　　　　　240

Ala Phe Lys Asp Val Val Pro Leu Ser Ala Gln Ala Gly Asp Pro Arg
　　　　　　　245　　　　　　　　　250　　　　　　　　　255

Met Gln Arg Met Met Leu Arg Leu Ala Arg Ala Arg Thr Thr Val Val
　　　　　　　260　　　　　　　　　265　　　　　　　　　270

Val Val Phe Ser Asn Arg His Leu Ala Gly Val Phe Phe Arg Ser Val
　　　　　275　　　　　　　　　280　　　　　　　　　285

Val Leu Ala Asn Leu Thr Gly Lys Val Trp Ile Ala Ser Glu Asp Trp
　　　290　　　　　　　　　295　　　　　　　　　300

Ala Ile Ser Thr Tyr Ile Thr Asn Val Pro Gly Ile Gln Gly Ile Gly
305　　　　　　　　　310　　　　　　　　　315　　　　　　　　　320

Thr Val Leu Gly Val Ala Ile Gln Gln Arg Gln Val Pro Gly Leu Lys
　　　　　　　325　　　　　　　　　330　　　　　　　　　335

Glu Phe Glu Glu Ser Tyr Val Gln Ala Val Met Gly Ala Pro Arg Thr
　　　　　　　340　　　　　　　　　345　　　　　　　　　350

Cys Pro Glu Gly Ser Trp Cys Gly Thr Asn Gln Leu Cys Arg Glu Cys
　　　　　　　355　　　　　　　　　360　　　　　　　　　365

His Ala Phe Thr Thr Trp Asn Met Pro Glu Leu Gly Ala Phe Ser Met
　　　370　　　　　　　　　375　　　　　　　　　380

Ser Ala Ala Tyr Asn Val Tyr Glu Ala Val Tyr Ala Val Ala His Gly
385　　　　　　　　　390　　　　　　　　　395　　　　　　　　　400

Leu His Gln Leu Leu Gly Cys Thr Ser Gly Thr Cys Ala Arg Gly Pro
　　　　　　　405　　　　　　　　　410　　　　　　　　　415

Val Tyr Pro Trp Gln Leu Leu Gln Gln Ile Tyr Lys Val Asn Phe Leu
　　　　　　　420　　　　　　　　　425　　　　　　　　　430

MON-0301.ST25.txt

```
Leu His Lys Lys Thr Val Ala Phe Asp Asp Lys Gly Asp Pro Leu Gly
    435                     440                 445

Tyr Tyr Asp Ile Ile Ala Trp Asp Trp Asn Gly Pro Glu Trp Thr Phe
    450                     455                 460

Glu Val Ile Gly Ser Ala Ser Leu Ser Pro Val His Leu Asp Ile Asn
465                     470                 475                 480

Lys Thr Lys Ile Gln Trp His Gly Lys Asn Asn Gln Val Pro Val Ser
                485                 490                 495

Val Cys Thr Arg Asp Cys Leu Glu Gly His His Arg Leu Val Met Gly
            500                 505                 510

Ser His His Cys Cys Phe Glu Cys Met Pro Cys Glu Ala Gly Thr Phe
        515                 520                 525

Leu Asn Thr Ser Glu Leu His Thr Cys Gln Pro Cys Gly Thr Glu Glu
    530                     535                 540

Trp Ala Pro Glu Gly Ser Ser Ala Cys Phe Ser Arg Thr Val Glu Phe
545                     550                 555                 560

Leu Gly Trp His Glu Pro Ile Ser Leu Val Leu Leu Ala Ala Asn Thr
            565                 570                 575

Leu Leu Leu Leu Leu Leu Ile Gly Thr Ala Gly Leu Phe Ala Trp Arg
        580                 585                 590

Leu His Thr Pro Val Val Arg Ser Ala Gly Gly Arg Leu Cys Phe Leu
    595                     600                 605

Met Leu Gly Ser Leu Val Ala Gly Ser Cys Ser Leu Tyr Ser Phe Phe
    610                     615                 620

Gly Lys Pro Thr Val Pro Ala Cys Leu Leu Arg Gln Pro Leu Phe Ser
625                     630                 635                 640

Leu Gly Phe Ala Ile Phe Leu Ser Cys Leu Thr Ile Arg Ser Phe Gln
            645                 650                 655

Leu Val Ile Ile Phe Lys Phe Ser Thr Lys Val Pro Thr Phe Tyr His
            660                 665                 670

Thr Trp Ala Gln Asn His Gly Ala Gly Ile Phe Val Ile Val Ser Ser
    675                     680                 685

Thr Val His Leu Phe Leu Cys Leu Thr Trp Leu Ala Met Trp Thr Pro
    690                     695                 700

Arg Pro Thr Arg Glu Tyr Gln Arg Phe Pro His Leu Val Ile Leu Glu
705                     710                 715                 720
```

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MON-0301.ST25.txt

```
Cys Thr Glu Val Asn Ser Val Gly Phe Leu Val Ala Phe Ala His Asn
                725                 730                 735

Ile Leu Leu Ser Ile Ser Thr Phe Val Cys Ser Tyr Leu Gly Lys Glu
            740                 745                 750

Leu Pro Glu Asn Tyr Asn Glu Ala Lys Cys Val Thr Phe Ser Leu Leu
        755                 760                 765

Leu His Phe Val Ser Trp Ile Ala Phe Phe Thr Met Ser Ser Ile Tyr
    770                 775                 780

Gln Gly Ser Tyr Leu Pro Ala Val Asn Val Leu Ala Gly Leu Ala Thr
785                 790                 795                 800

Leu Ser Gly Gly Phe Ser Gly Tyr Phe Leu Pro Lys Cys Tyr Val Ile
                805                 810                 815

Leu Cys Arg Pro Glu Leu Asn Asn Thr Glu His Phe Gln Ala Ser Ile
            820                 825                 830

Gln Asp Tyr Thr Arg Arg Cys Gly Thr Thr
        835                 840


<210>   16
<211>   840
<212>   PRT
<213>   Rattus rattus

<400>   16

Met Leu Phe Trp Ala Ala His Leu Leu Leu Ser Leu Gln Leu Val Tyr
1               5                   10                  15

Cys Trp Ala Phe Ser Cys Gln Arg Thr Glu Ser Ser Pro Gly Phe Ser
            20                  25                  30

Leu Pro Gly Asp Phe Leu Leu Ala Gly Leu Phe Ser Leu His Gly Asp
        35                  40                  45

Cys Leu Gln Val Arg His Arg Pro Leu Val Thr Ser Cys Asp Arg Pro
    50                  55                  60

Asp Ser Phe Asn Gly His Gly Tyr His Leu Phe Gln Ala Met Arg Phe
65                  70                  75                  80

Thr Val Glu Glu Ile Asn Asn Ser Ser Ala Leu Leu Pro Asn Ile Thr
                85                  90                  95

Leu Gly Tyr Glu Leu Tyr Asp Val Cys Ser Glu Ser Ala Asn Val Tyr
                100                 105                 110

Ala Thr Leu Arg Val Leu Ala Leu Gln Gly Pro Arg His Ile Glu Ile
```

MON-0301.ST25.txt
　　　115　　　　　　　　　　　　120　　　　　　　　　　　125

Gln Lys Asp Leu Arg Asn His Ser Ser Lys Val Val Ala Phe Ile Gly
　　　130　　　　　　　　　　　135　　　　　　　　　　　140

Pro Asp Asn Thr Asp His Ala Val Thr Thr Ala Ala Leu Leu Gly Pro
145　　　　　　　　　　　150　　　　　　　　　　　155　　　　　　　　　　　160

Phe Leu Met Pro Leu Val Ser Tyr Glu Ala Ser Ser Val Val Leu Ser
　　　　　　　　　　　165　　　　　　　　　　　170　　　　　　　　　　　175

Ala Lys Arg Lys Phe Pro Ser Phe Leu Arg Thr Val Pro Ser Asp Arg
　　　　　　　　　　　180　　　　　　　　　　　185　　　　　　　　　　　190

His Gln Val Glu Val Met Val Gln Leu Leu Gln Ser Phe Gly·Trp Val
　　　　　　　　　　　195　　　　　　　　　　　200　　　　　　　　　　　205

Trp Ile Ser Leu Ile Gly Ser Tyr Gly Asp Tyr Gly Gln Leu Gly Val
　　　210　　　　　　　　　　　215　　　　　　　　　　　220

Gln Ala Leu Glu Glu Leu Ala Val Pro Arg Gly Ile Cys Val Ala Phe
225　　　　　　　　　　　230　　　　　　　　　　　235　　　　　　　　　　　240

Lys Asp Ile Val Pro Phe Ser Ala Arg Val Gly Asp Pro Arg Met Gln
　　　　　　　　　　　245　　　　　　　　　　　250　　　　　　　　　　　255

Ser Met Met Gln His Leu Ala Gln Ala Arg Thr Thr Val Val Val Val
　　　　　　　　　　　260　　　　　　　　　　　265　　　　　　　　　　　270

Phe Ser Asn Arg His Leu Ala Arg Val Phe Phe Arg Ser Val Val Leu
　　　　　　　　　　　275　　　　　　　　　　　280　　　　　　　　　　　285

Ala Asn Leu Thr Gly Lys Val Trp Val Ala Ser Glu Asp Trp Ala Ile
　　　290　　　　　　　　　　　295　　　　　　　　　　　300

Ser Thr Tyr Ile Thr Ser Val Thr Gly Ile Gln Gly Ile Gly Thr Val
305　　　　　　　　　　　310　　　　　　　　　　　315　　　　　　　　　　　320

Leu Gly Val Ala Val Gln Gln Arg Gln Val Pro Gly Leu Lys Glu Phe
　　　　　　　　　　　325　　　　　　　　　　　330　　　　　　　　　　　335

Glu Glu Ser Tyr Val Arg Ala Val Thr Ala Ala Pro Ser Ala Cys Pro
　　　　　　　　　　　340　　　　　　　　　　　345　　　　　　　　　　　350

Glu Gly Ser Trp Cys Ser Thr Asn Gln Leu Cys Arg Glu Cys His Thr
　　　　　　　　　　　355　　　　　　　　　　　360　　　　　　　　　　　365

Phe Thr Thr Arg Asn Met Pro Thr Leu Gly Ala Phe Ser Met Ser Ala
　　　370　　　　　　　　　　　375　　　　　　　　　　　380

Ala Tyr Arg Val Tyr Glu Ala Val Tyr Ala Val Ala His Gly Leu His
385　　　'　　　　　　　　390　　　　　　　　　　　395　　　　　　　　　　　400

MON-0301.ST25.txt

```
    Gln Leu Leu Gly Cys Thr Ser Glu Ile Cys Ser Arg Gly Pro Val Tyr
                    405                 410                 415


    Pro Trp Gln Leu Leu Gln Gln Ile Tyr Lys Val Asn Phe Leu Leu His
                420                 425                 430


    Glu Asn Thr Val Ala Phe Asp Asp Asn Gly Asp Thr Leu Gly Tyr Tyr
            435                 440                 445


    Asp Ile Ile Ala Trp Asp Trp Asn Gly Pro Glu Trp Thr Phe Glu Ile
        450                 455                 460


    Ile Gly Ser Ala Ser Leu Ser Pro Val His Leu Asp Ile Asn Lys Thr
    465                 470                 475                 480


    Lys Ile Gln Trp His Gly Lys Asn Asn Gln Val Pro Val Ser Val Cys
                    485                 490                 495


    Thr Thr Asp Cys Leu Ala Gly His His Arg Val Val Val Gly Ser His
                500             505                 510


    His Cys Cys Phe Glu Cys Val Pro Cys Glu Ala Gly Thr Phe Leu Asn
            515                 520                 525


    Met Ser Glu Leu His Ile Cys Gln Pro Cys Gly Thr Glu Glu Trp Ala
        530                 535                 540


    Pro Lys Glu Ser Thr Thr Cys Phe Pro Arg Thr Val Glu Phe Leu Ala
    545                 550                 555                 560


    Trp His Glu Pro Ile Ser Leu Val Leu Ile Ala Ala Asn Thr Leu Leu
                565                 570                 575


    Leu Leu Leu Leu Val Gly Thr Ala Gly Leu Phe Ala Trp His Phe His
                580                 585                 590


    Thr Pro Val Val Arg Ser Ala Gly Gly Arg Leu Cys Phe Leu Met Leu
                595                 600                 605


    Gly Ser Leu Val Ala Gly Ser Cys Ser Phe Tyr Ser Phe Phe Gly Glu
        610                 615                 620


    Pro Thr Val Pro Ala Cys Leu Leu Arg Gln Pro Leu Phe Ser Leu Gly
    625                 630                 635                 640


    Phe Ala Ile Phe Leu Ser Cys Leu Thr Ile Arg Ser Phe Gln Leu Val
                645                 650                 655


    Ile Ile Phe Lys Phe Ser Thr Lys Val Pro Thr Phe Tyr Arg Thr Trp
                660                 665                 670


    Ala Gln Asn His Gly Ala Gly Leu Phe Val Ile Val Ser Ser Thr Val
```

MON-0301.ST25.txt
<div style="text-align:center">675   680   685</div>

His Leu Leu Ile Cys Leu Thr Trp Leu Val Met Trp Thr Pro Arg Pro
   690   695   700

Thr Arg Glu Tyr Gln Arg Phe Pro His Leu Val Ile Leu Glu Cys Thr
705   710   715   720

Glu Val Asn Ser Val Gly Phe Leu Leu Ala Phe Thr His Asn Ile Leu
         725   730   735

Leu Ser Ile Ser Thr Phe Val Cys Ser Tyr Leu Gly Lys Glu Leu Pro
         740   745   750

Glu Asn Tyr Asn Glu Ala Lys Cys Val Thr Phe Ser Leu Leu Leu Asn
         755   760   765

Phe Val Ser Trp Ile Ala Phe Phe Thr Met Ala Ser Ile Tyr Gln Gly
   770   775   780

Ser Tyr Leu Pro Ala Val Asn Val Leu Ala Gly Leu Thr Thr Leu Ser
785   790   795   800

Gly Gly Phe Ser Gly Tyr Phe Leu Pro Lys Cys Tyr Val Ile Leu Cys
         805   810   815

Arg Pro Glu Leu Asn Asn Thr Glu His Phe Gln Ala Ser Ile Gln Asp
         820   825   830

Tyr Thr Arg Arg Cys Gly Thr Thr
         835   840

<210> 17
<211> 841
<212> PRT
<213> Homo sapiens

<400> 17

Met Leu Leu Cys Thr Ala Arg Leu Val Gly Leu Gln Leu Leu Ile Ser
1   5   10   15

Cys Cys Trp Ala Phe Ala Cys His Ser Thr Glu Ser Ser Pro Asp Phe
         20   25   30

Thr Leu Pro Gly Asp Tyr Leu Leu Ala Gly Leu Phe Pro Leu His Ser
         35   40   45

Gly Cys Leu Gln Val Arg His Arg Pro Glu Val Thr Leu Cys Asp Arg
   50   55   60

Ser Cys Ser Phe Asn Glu His Gly Tyr His Leu Phe Gln Ala Met Arg
65   70   75   80

<div style="text-align:center">Page 33</div>

MON-0301.ST25.txt

```
Leu Gly Val Glu Glu Ile Asn Asn Ser Thr Ala Leu Leu Pro Asn Ile
                85                  90                  95

Thr Leu Gly Tyr Gln Leu Tyr Asp Val Cys Ser Asp Ser Ala Asn Val
            100                 105                 110

Tyr Ala Thr Leu Arg Val Leu Ser Leu Pro Gly Gln His His Ile Glu
        115                 120                 125

Leu Gln Gly Asp Leu Leu His Tyr Ser Pro Thr Val Leu Ala Val Ile
    130                 135                 140

Gly Pro Asp Ser Thr Asn Arg Ala Ala Thr Thr Ala Ala Leu Leu Ser
145                 150                 155                 160

Pro Phe Leu Val Pro Met Ile Ser Tyr Ala Ala Ser Ser Glu Thr Leu
            165                 170                 175

Ser Val Lys Arg Gln Tyr Pro Ser Phe Leu Arg Thr Ile Pro Asn Asp
            180                 185                 190

Lys Tyr Gln Val Glu Thr Met Val Leu Leu Leu Gln Lys Phe Gly Trp
        195                 200                 205

Thr Trp Ile Ser Leu Val Gly Ser Ser Asp Asp Tyr Gly Gln Leu Gly
    210                 215                 220

Val Gln Ala Leu Glu Asn Gln Ala Thr Gly Gln Gly Ile Cys Ile Ala
225                 230                 235                 240

Phe Lys Asp Ile Met Pro Phe Ser Ala Gln Val Gly Asp Glu Arg Met
            245                 250                 255

Gln Cys Leu Met Arg His Leu Ala Gln Ala Gly Ala Thr Val Val Val
            260                 265                 270

Val Phe Ser Ser Arg Gln Leu Ala Arg Val Phe Phe Glu Ser Val Val
            275                 280                 285

Leu Thr Asn Leu Thr Gly Lys Val Trp Val Ala Ser Glu Ala Trp Ala
    290                 295                 300

Leu Ser Arg His Ile Thr Gly Val Pro Gly Ile Gln Arg Ile Gly Met
305                 310                 315                 320

Val Leu Gly Val Ala Ile Gln Lys Arg Ala Val Pro Gly Leu Lys Ala
            325                 330                 335

Phe Glu Glu Ala Tyr Ala Arg Ala Asp Lys Lys Ala Pro Arg Pro Cys
            340                 345                 350

His Lys Gly Ser Trp Cys Ser Ser Asn Gln Leu Cys Arg Glu Cys Gln
        355                 360                 365
```

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MON-0301.ST25.txt

```
Ala Phe Met Ala His Thr Met Pro Lys Leu Lys Ala Phe Ser Met Ser
    370                 375                 380

Ser Ala Tyr Asn Ala Tyr Arg Ala Val Tyr Ala Val Ala His Gly Leu
385                 390                 395                 400

His Gln Leu Leu Gly Cys Ala Ser Gly Ala Cys Ser Arg Gly Arg Val
                405                 410                 415

Tyr Pro Trp Gln Leu Leu Glu Gln Ile His Lys Val His Phe Leu Leu
                420                 425                 430

His Lys Asp Thr Val Ala Phe Asn Asp Asn Arg Asp Pro Leu Ser Ser
        435                 440                 445

Tyr Asn Ile Ile Ala Trp Asp Trp Asn Gly Pro Lys Trp Thr Phe Thr
    450                 455                 460

Val Leu Gly Ser Ser Thr Trp Ser Pro Val Gln Leu Asn Ile Asn Glu
465                 470                 475                 480

Thr Lys Ile Gln Trp His Gly Lys Asp Asn Gln Val Pro Lys Ser Val
                485                 490                 495

Cys Ser Ser Asp Cys Leu Glu Gly His Gln Arg Val Val Thr Gly Phe
                500                 505                 510

His His Cys Cys Phe Glu Cys Val Pro Cys Gly Ala Gly Thr Phe Leu
        515                 520                 525

Asn Lys Ser Asp Leu Tyr Arg Cys Gln Pro Cys Gly Lys Glu Glu Trp
    530                 535                 540

Ala Pro Glu Gly Ser Gln Thr Cys Phe Pro Arg Thr Val Val Phe Leu
545                 550                 555                 560

Ala Leu Arg Glu His Thr Ser Trp Val Leu Leu Ala Ala Asn Thr Leu
                565                 570                 575

Leu Leu Leu Leu Leu Leu Gly Thr Ala Gly Leu Phe Ala Trp His Leu
                580                 585                 590

Asp Thr Pro Val Val Arg Ser Ala Gly Gly Arg Leu Cys Phe Leu Met
        595                 600                 605

Leu Gly Ser Leu Ala Ala Gly Ser Gly Ser Leu Tyr Gly Phe Phe Gly
    610                 615                 620

Glu Pro Thr Arg Pro Ala Cys Leu Leu Arg Gln Ala Leu Phe Ala Leu
625                 630                 635                 640
```

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MON-0301.ST25.txt

```
Gly Phe Thr Ile Phe Leu Ser Cys Leu Thr Val Arg Ser Phe Gln Leu
              645                 650                 655


Ile Ile Ile Phe Lys Phe Ser Thr Lys Val Pro Thr Phe Tyr His Ala
              660                 665                 670


Trp Val Gln Asn His Gly Ala Gly Leu Phe Val Met Ile Ser Ser Ala
          675                 680                 685


Ala Gln Leu Leu Ile Cys Leu Thr Trp Leu Val Val Trp Thr Pro Leu
      690                 695                 700


Pro Ala Arg Glu Tyr Gln Arg Phe Pro His Leu Val Met Leu Glu Cys
705                 710                 715                 720


Thr Glu Thr Asn Ser Leu Gly Phe Ile Leu Ala Phe Leu Tyr Asn Gly
              725                 730                 735


Leu Leu Ser Ile Ser Ala Phe Ala Cys Ser Tyr Leu Gly Lys Asp Leu
              740                 745                 750


Pro Glu Asn Tyr Asn Glu Ala Lys Cys Val Thr Phe Ser Leu Leu Phe
          755                 760                 765


Asn Phe Val Ser Trp Ile Ala Phe Phe Thr Thr Ala Ser Val Tyr Asp
      770                 775                 780


Gly Lys Tyr Leu Pro Ala Ala Asn Met Met Ala Gly Leu Ser Ser Leu
785                 790                 795                 800


Ser Ser Gly Phe Gly Gly Tyr Phe Leu Pro Lys Cys Tyr Val Ile Leu
              805                 810                 815


Cys Arg Pro Asp Leu Asn Ser Thr Glu His Phe Gln Ala Ser Ile Gln
              820                 825                 830


Asp Tyr Thr Arg Arg Cys Gly Ser Thr
          835                 840
```

```
<210> 18
<211> 843
<212> PRT
<213> Mus musculus

<400> 18

Met Gly Pro Gln Ala Arg Thr Leu His Leu Leu Phe Leu Leu Leu His
1               5               10                  15


Ala Leu Pro Lys Pro Val Met Leu Val Gly Asn Ser Asp Phe His Leu
              20                  25                  30


Ala Gly Asp Tyr Leu Leu Gly Gly Leu Phe Thr Leu His Ala Asn Val
          35                  40                  45
```

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MON-0301.ST25.txt

```
Lys Ser Val Ser His Leu Ser Tyr Leu Gln Val Pro Lys Cys Asn Glu
    50              55              60

Tyr Asn Met Lys Val Leu Gly Tyr Asn Leu Met Gln Ala Met Arg Phe
65              70              75              80

Ala Val Glu Glu Ile Asn Asn Cys Ser Ser Leu Leu Pro Gly Val Leu
            85              90              95

Leu Gly Tyr Glu Met Val Asp Val Cys Tyr Leu Ser Asn Asn Ile Gln
            100             105             110

Pro Gly Leu Tyr Phe Leu Ser Gln Ile Asp Asp Phe Leu Pro Ile Leu
        115             120             125

Lys Asp Tyr Ser Gln Tyr Arg Pro Gln Val Val Ala Val Ile Gly Pro
    130             135             140

Asp Asn Ser Glu Ser Ala Ile Thr Val Ser Asn Ile Leu Ser Tyr Phe
145             150             155             160

Leu Val Pro Gln Val Thr Tyr Ser Ala Ile Thr Asp Lys Leu Arg Asp
            165             170             175

Lys Arg Arg Phe Pro Ala Met Leu Arg Thr Val Pro Ser Ala Thr His
            180             185             190

His Ile Glu Ala Met Val Gln Leu Met Val His Phe Gln Trp Asn Trp
            195             200             205

Ile Val Val Leu Val Ser Asp Asp Asp Tyr Gly Arg Glu Asn Ser His
    210             215             220

Leu Leu Ser Gln Arg Leu Thr Asn Thr Gly Asp Ile Cys Ile Ala Phe
225             230             235             240

Gln Glu Val Leu Pro Val Pro Glu Pro Asn Gln Ala Val Arg Pro Glu
            245             250             255

Glu Gln Asp Gln Leu Asp Asn Ile Leu Asp Lys Leu Arg Arg Thr Ser
        260             265             270

Ala Arg Val Val Val Ile Phe Ser Pro Glu Leu Ser Leu His Asn Phe
    275             280             285

Phe Arg Glu Val Leu Arg Trp Asn Phe Thr Gly Phe Val Trp Ile Ala
    290             295             300

Ser Glu Ser Trp Ala Ile Asp Pro Val Leu His Asn Leu Thr Glu Leu
305             310             315             320

Arg His Thr Gly Thr Phe Leu Gly Val Thr Ile Gln Arg Val Ser Ile
```

325   330   335

Pro Gly Phe Ser Gln Phe Arg Val Arg His Asp Lys Pro Glu Tyr Pro
        340   345   350

Met Pro Asn Glu Thr Ser Leu Arg Thr Thr Cys Asn Gln Asp Cys Asp
        355   360   365

Ala Cys Met Asn Ile Thr Glu Ser Phe Asn Asn Val Leu Met Leu Ser
    370   375   380

Gly Glu Arg Val Val Tyr Ser Val Tyr Ser Ala Val Tyr Ala Val Ala
385   390   395   400

His Thr Leu His Arg Leu Leu His Cys Asn Gln Val Arg Cys Thr Lys
            405   410   415

Gln Ile Val Tyr Pro Trp Gln Leu Leu Arg Glu Ile Trp His Val Asn
        420   425   430

Phe Thr Leu Leu Gly Asn Gln Leu Phe Phe Asp Glu Gln Gly Asp Met
        435   440   445

Pro Met Leu Leu Asp Ile Ile Gln Trp Gln Trp Gly Leu Ser Gln Asn
    450   455   460

Pro Phe Gln Ser Ile Ala Ser Tyr Ser Pro Thr Glu Thr Arg Leu Thr
465   470   475   480

Tyr Ile Ser Asn Val Ser Trp Tyr Thr Pro Asn Asn Thr Val Pro Ile
            485   490   495

Ser Met Cys Ser Lys Ser Cys Gln Pro Gly Gln Met Lys Lys Pro Ile
        500   505   510

Gly Leu His Pro Cys Cys Phe Glu Cys Val Asp Cys Pro Pro Gly Thr
        515   520   525

Tyr Leu Asn Arg Ser Val Asp Glu Phe Asn Cys Leu Ser Cys Pro Gly
    530   535   540

Ser Met Trp Ser Tyr Lys Asn Asn Ile Ala Cys Phe Lys Arg Arg Leu
545   550   555   560

Ala Phe Leu Glu Trp His Glu Val Pro Thr Ile Val Val Thr Ile Leu
            565   570   575

Ala Ala Leu Gly Phe Ile Ser Thr Leu Ala Ile Leu Leu Ile Phe Trp
        580   585   590

Arg His Phe Gln Thr Pro Met Val Arg Ser Ala Gly Gly Pro Met Cys
    595   600   605

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MON-0301.ST25.txt

```
Phe Leu Met Leu Val Pro Leu Leu Leu Ala Phe Gly Met Val Pro Val
    610             615             620
```

```
Tyr Val Gly Pro Pro Thr Val Phe Ser Cys Phe Cys Arg Gln Ala Phe
625             630             635             640
```

```
Phe Thr Val Cys Phe Ser Val Cys Leu Ser Cys Ile Thr Val Arg Ser
                645             650             655
```

```
Phe Gln Ile Val Cys Val Phe Lys Met Ala Arg Arg Leu Pro Ser Ala
                660             665             670
```

```
Tyr Gly Phe Trp Met Arg Tyr His Gly Pro Tyr Val Phe Val Ala Phe
            675             680             685
```

```
Ile Thr Ala Val Lys Val Ala Leu Val Ala Gly Asn Met Leu Ala Thr
    690             695             700
```

```
Thr Ile Asn Pro Ile Gly Arg Thr Asp Pro Asp Asp Pro Asn Ile Ile
705             710             715             720
```

```
Ile Leu Ser Cys His Pro Asn Tyr Arg Asn Gly Leu Leu Phe Asn Thr
                725             730             735
```

```
Ser Met Asp Leu Leu Leu Ser Val Leu Gly Phe Ser Phe Ala Tyr Val
            740             745             750
```

```
Gly Lys Glu Leu Pro Thr Asn Tyr Asn Glu Ala Lys Phe Ile Thr Leu
            755             760             765
```

```
Ser Met Thr Phe Ser Phe Thr Ser Ser Ile Ser Leu Cys Thr Phe Met
    770             775             780
```

```
Ser Val His Asp Gly Val Leu Val Thr Ile Met Asp Leu Leu Val Thr
785             790             795             800
```

```
Val Leu Asn Phe Leu Ala Ile Gly Leu Gly Tyr Phe Gly Pro Lys Cys
                805             810             815
```

```
Tyr Met Ile Leu Phe Tyr Pro Glu Arg Asn Thr Ser Ala Tyr Phe Asn
            820             825             830
```

```
Ser Met Ile Gln Gly Tyr Thr Met Arg Lys Ser
            835             840
```

```
<210>   19
<211>   843
<212>   PRT
<213>   Rattus rattus

<400>   19

Met Gly Pro Gln Ala Arg Thr Leu Cys Leu Leu Ser Leu Leu Leu His
1               5               10              15
```

MON-0301.ST25.txt

```
Val Leu Pro Lys Pro Gly Lys Leu Val Glu Asn Ser Asp Phe His Leu
            20              25              30

Ala Gly Asp Tyr Leu Leu Gly Gly Leu Phe Thr Leu His Ala Asn Val
            35              40              45

Lys Ser Ile Ser His Leu Ser Tyr Leu Gln Val Pro Lys Cys Asn Glu
    50              55              60

Phe Thr Met Lys Val Leu Gly Tyr Asn Leu Met Gln Ala Met Arg Phe
65              70              75              80

Ala Val Glu Glu Ile Asn Asn Cys Ser Ser Leu Leu Pro Gly Val Leu
            85              90              95

Leu Gly Tyr Glu Met Val Asp Val Cys Tyr Leu Ser Asn Asn Ile His
            100             105             110

Pro Gly Leu Tyr Phe Leu Ala Gln Asp Asp Leu Leu Pro Ile Leu
            115             120             125

Lys Asp Tyr Ser Gln Tyr Met Pro His Val Val Ala Val Ile Gly Pro
    130             135             140

Asp Asn Ser Glu Ser Ala Ile Thr Val Ser Asn Ile Leu Ser His Phe
145             150             155             160

Leu Ile Pro Gln Ile Thr Tyr Ser Ala Ile Ser Asp Lys Leu Arg Asp
            165             170             175

Lys Arg His Phe Pro Ser Met Leu Arg Thr Val Pro Ser Ala Thr His
            180             185             190

His Ile Glu Ala Met Val Gln Leu Met Val His Phe Gln Trp Asn Trp
    195             200             205

Ile Val Val Leu Val Ser Asp Asp Asp Tyr Gly Arg Glu Asn Ser His
    210             215             220

Leu Leu Ser Gln Arg Leu Thr Lys Thr Ser Asp Ile Cys Ile Ala Phe
225             230             235             240

Gln Glu Val Leu Pro Ile Pro Glu Ser Ser Gln Val Met Arg Ser Glu
            245             250             255

Glu Gln Arg Gln Leu Asp Asn Ile Leu Asp Lys Leu Arg Arg Thr Ser
            260             265             270

Ala Arg Val Val Val Val Phe Ser Pro Glu Leu Ser Leu Tyr Ser Phe
            275             280             285
```

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MON-0301.ST25.txt

```
Phe His Glu Val Leu Arg Trp Asn Phe Thr Gly Phe Val Trp Ile Ala
    290                 295                 300

Ser Glu Ser Trp Ala Ile Asp Pro Val Leu His Asn Leu Thr Glu Leu
305                 310           .       315                 320

Arg His Thr Gly Thr Phe Leu Gly Val Thr Ile Gln Arg Val Ser Ile
                325                 330                 335

Pro Gly Phe Ser Gln Phe Arg Val Arg Arg Asp Lys Pro Gly Tyr Pro
            340                 345                 350

Val Pro Asn Thr Thr Asn Leu Arg Thr Thr Cys Asn Gln Asp Cys Asp
        355                 360                 365

Ala Cys Leu Asn Thr Thr Lys Ser Phe Asn Asn Ile Leu Ile Leu Ser
    370                 375                 380

Gly Glu Arg Val Val Tyr Ser Val Tyr Ser Ala Val Tyr Ala Val Ala
385                 390                 395                 400

His Ala Leu His Arg Leu Leu Gly Cys Asn Arg Val Arg Cys Thr Lys
            405                 410                 415

Gln Lys Val Tyr Pro Trp Gln Leu Leu Arg Glu Ile Trp His Val Asn
            420           .   425                 430

Phe Thr Leu Leu Gly Asn Arg Leu Phe Phe Asp Gln Gln Gly Asp Met
    435                 440                 445

Pro Met Leu Leu Asp Ile Ile Gln Trp Gln Trp Asp Leu Ser Gln Asn
    450                 455                 460

Pro Phe Gln Ser Ile Ala Ser Tyr Ser Pro Thr Ser Lys Arg Leu Thr
465                 470                 475                 480

Tyr Ile Asn Asn Val Ser Trp Tyr Thr Pro Asn Asn Thr Val Pro Val
                485                 490                 495

Ser Met Cys Ser Lys Ser Cys Gln Pro Gly Gln Met Lys Lys Ser Val
            500                 505                 510

Gly Leu His Pro Cys Cys Phe Glu Cys Leu Asp Cys Met Pro Gly Thr
            515                 520                 525

Tyr Leu Asn Arg Ser Ala Asp Glu Phe Asn Cys Leu Ser Cys Pro Gly
    530                 535       .         540

Ser Met Trp Ser Tyr Lys Asn Asp Ile Thr Cys Phe Gln Arg Arg Pro
545                 550                 555                 560

Thr Phe Leu Glu Trp His Glu Val Pro Thr Ile Val Val Ala Ile Leu
                565                 570                 575
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```
Ala Ala Leu Gly Phe Phe Ser Thr Leu Ala Ile Leu Phe Ile Phe Trp
        580             585             590

Arg His Phe Gln Thr Pro Met Val Arg Ser Ala Gly Gly Pro Met Cys
        595             600             605

Phe Leu Met Leu Val Pro Leu Leu Leu Ala Phe Gly Met Val Pro Val
    610             615             620

Tyr Val Gly Pro Pro Thr Val Phe Ser Cys Phe Cys Arg Gln Ala Phe
625             630             635             640

Phe Thr Val Cys Phe Ser Ile Cys Leu Ser Cys Ile Thr Val Arg Ser
            645             650             655

Phe Gln Ile Val Cys Val Phe Lys Met Ala Arg Arg Leu Pro Ser Ala
            660             665             670

Tyr Ser Phe Trp Met Arg Tyr His Gly Pro Tyr Val Phe Val Ala Phe
        675             680             685

Ile Thr Ala Ile Lys Val Ala Leu Val Val Gly Asn Met Leu Ala Thr
    690             695             700

Thr Ile Asn Pro Ile Gly Arg Thr Asp Pro Asp Asp Pro Asn Ile Met
705             710             715             720

Ile Leu Ser Cys His Pro Asn Tyr Arg Asn Gly Leu Leu Phe Asn Thr
            725             730             735

Ser Met Asp Leu Leu Leu Ser Val Leu Gly Phe Ser Phe Ala Tyr Met
        740             745             750

Gly Lys Glu Leu Pro Thr Asn Tyr Asn Glu Ala Lys Phe Ile Thr Leu
        755             760             765

Ser Met Thr Phe Ser Phe Thr Ser Ser Ile Ser Leu Cys Thr Phe Met
    770             775             780

Ser Val His Asp Gly Val Leu Val Thr Ile Met Asp Leu Leu Val Thr
785             790             795             800

Val Leu Asn Phe Leu Ala Ile Gly Leu Gly Tyr Phe Gly Pro Lys Cys
            805             810             815

Tyr Met Ile Leu Phe Tyr Pro Glu Arg Asn Thr Ser Ala Tyr Phe Asn
        820             825             830

Ser Met Ile Gln Gly Tyr Thr Met Arg Lys Ser
        835             840
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<210> 20
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<213> Homo sapiens

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Tyr Leu Leu Gly Gly Leu Phe Ser Leu His Ala Asn Met Lys Gly Ile
        35   40   45

Val His Leu Asn Phe Leu Gln Val Pro Met Cys Lys Glu Tyr Glu Val
    50   55   60

Lys Val Ile Gly Tyr Asn Leu Met Gln Ala Met Arg Phe Ala Val Glu
65   70   75   80

Glu Ile Asn Asn Asp Ser Ser Leu Leu Pro Gly Val Leu Leu Gly Tyr
                85   90   95

Glu Ile Val Asp Val Cys Tyr Ile Ser Asn Asn Val Gln Pro Val Leu
            100   105   110

Tyr Phe Leu Ala His Glu Asp Asn Leu Leu Pro Ile Gln Glu Asp Tyr
        115   120   125

Ser Asn Tyr Ile Ser Arg Val Val Ala Val Ile Gly Pro Asp Asn Ser
    130   135   140

Glu Ser Val Met Thr Val Ala Asn Phe Leu Ser Leu Phe Leu Leu Pro
145   150   155   160

Gln Ile Thr Tyr Ser Ala Ile Ser Asp Glu Leu Arg Asp Lys Val Arg
                165   170   175

Phe Pro Ala Leu Leu Arg Thr Thr Pro Ser Ala Asp His His Val Glu
            180   185   190

Ala Met Val Gln Leu Met Leu His Phe Arg Trp Asn Trp Ile Ile Val
        195   200   205

Leu Val Ser Ser Asp Thr Tyr Gly Arg Asp Asn Gly Gln Leu Leu Gly
    210   215   220

Glu Arg Val Ala Arg Arg Asp Ile Cys Ile Ala Phe Gln Glu Thr Leu
225   230   235   240

Pro Thr Leu Gln Pro Asn Gln Asn Met Thr Ser Glu Glu Arg Gln Arg
                245   250   255

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Leu Val Thr Ile Val Asp Lys Leu Gln Gln Ser Thr Ala Arg Val Val
        260                 265                 270

Val Val Phe Ser Pro Asp Leu Thr Leu Tyr His Phe Phe Asn Glu Val
        275                 280                 285

Leu Arg Gln Asn Phe Thr Gly Ala Val Trp Ile Ala Ser Glu Ser Trp
    290                 295                 300

Ala Ile Asp Pro Val Leu His Asn Leu Thr Glu Leu Gly His Leu Gly
305                 310                 315                 320

Thr Phe Leu Gly Ile Thr Ile Gln Ser Val Pro Ile Pro Gly Phe Ser
            325                 330                 335

Glu Phe Arg Glu Trp Gly Pro Gln Ala Gly Pro Pro Pro Leu Ser Arg
            340                 345                 350

Thr Ser Gln Ser Tyr Thr Cys Asn Gln Glu Cys Asp Asn Cys Leu Asn
        355                 360                 365

Ala Thr Leu Ser Phe Asn Thr Ile Leu Arg Leu Ser Gly Glu Arg Val
    370                 375                 380

Val Tyr Ser Val Tyr Ser Ala Val Tyr Ala Val Ala His Ala Leu His
385                 390                 395                 400

Ser Leu Leu Gly Cys Asp Lys Ser Thr Cys Thr Lys Arg Val Val Tyr
            405                 410                 415

Pro Trp Gln Leu Leu Glu Glu Ile Trp Lys Val Asn Phe Thr Leu Leu
        420                 425                 430

Asp His Gln Ile Phe Phe Asp Pro Gln Gly Asp Val Ala Leu His Leu
        435                 440                 445

Glu Ile Val Gln Trp Gln Trp Asp Arg Ser Gln Asn Pro Phe Gln Ser
    450                 455                 460

Val Ala Ser Tyr Tyr Pro Leu Gln Arg Gln Leu Lys Asn Ile Gln Asp
465                 470                 475                 480

Ile Ser Trp His Thr Val Asn Asn Thr Ile Pro Met Ser Met Cys Ser
            485                 490                 495

Lys Arg Cys Gln Ser Gly Gln Lys Lys Lys Pro Val Gly Ile His Val
            500                 505                 510

Cys Cys Phe Glu Cys Ile Asp Cys Leu Pro Gly Thr Phe Leu Asn His
        515                 520                 525

Thr Glu Asp Glu Tyr Glu Cys Gln Ala Cys Pro Asn Asn Glu Trp Ser
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MON-0301.ST25.txt
```
        530                         535                         540
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Tyr Gln Ser Glu Thr Ser Cys Phe Lys Arg Gln Leu Val Phe Leu Glu
545                     550                 555                 560
```

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Trp His Glu Ala Pro Thr Ile Ala Val Ala Leu Leu Ala Ala Leu Gly
                565                 570                 575
```

```
Phe Leu Ser Thr Leu Ala Ile Leu Val Ile Phe Trp Arg His Phe Gln
            580                 585                 590
```

```
Thr Pro Ile Val Arg Ser Ala Gly Gly Pro Met Cys Phe Leu Met Leu
        595                 600                 605
```

```
Thr Leu Leu Leu Val Ala Tyr Met Val Val Pro Val Tyr Val Gly Pro
    610                 615                 620
```

```
Pro Lys Val Ser Thr Cys Leu Cys Arg Gln Ala Leu Phe Pro Leu Cys
625                 630                 635                 640
```

```
Phe Thr Ile Cys Ile Ser Cys Ile Ala Val Arg Ser Phe Gln Ile Val
            645                 650                 655
```

```
Cys Ala Phe Lys Met Ala Ser Arg Phe Pro Arg Ala Tyr Ser Tyr Trp
            660                 665                 670
```

```
Val Arg Tyr Gln Gly Pro Tyr Val Ser Met Ala Phe Ile Thr Val Leu
        675                 680                 685
```

```
Lys Met Val Ile Val Ile Gly Met Leu Ala Thr Gly Leu Ser Pro
    690                 695                 700
```

```
Thr Thr Arg Thr Asp Pro Asp Asp Pro Lys Ile Thr Ile Val Ser Cys
705                 710                 715                 720
```

```
Asn Pro Asn Tyr Arg Asn Ser Leu Leu Phe Asn Thr Ser Leu Asp Leu
                725                 730                 735
```

```
Leu Leu Ser Val Val Gly Phe Ser Phe Ala Tyr Met Gly Lys Glu Leu
            740                 745                 750
```

```
Pro Thr Asn Tyr Asn Glu Ala Lys Phe Ile Thr Leu Ser Met Thr Phe
        755                 760                 765
```

```
Tyr Phe Thr Ser Ser Val Ser Leu Cys Thr Phe Met Ser Ala Tyr Ser
    770                 775                 780
```

```
Gly Val Leu Val Thr Ile Val Asp Leu Leu Val Thr Val Leu Asn Leu
785                 790                 795                 800
```

```
Leu Ala Ile Ser Leu Gly Tyr Phe Gly Pro Lys Cys Tyr Met Ile Leu
            805                 810                 815
```

```
Phe Tyr Pro Glu Arg Asn Thr Pro Ala Tyr Phe Asn Ser Met Ile Gln
        820                 825                 830


Gly Tyr Thr Met Arg Arg Asp
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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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ggcaccagag cgagaacaga acccacaacc atccagaggg aggggcagcg gccaccacct     300

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aattgaatat gtatcaaaca aaaataaatg gccttccatg ctgaaataac aaaaaacaga     960

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cgtgatgagc ctggagcccg cttggaattc cctccccacc cccaccccc gctcatgcca   · 1140

gctcgagctc tcgctcactc tctcaaaata aacttaagag gggcgcctgg gtggcgcagt    1200

cagttaagcg tccgacttca gccaggtcac gatcagcaca ttatttcctg gaccttccat    1260

tctcctttcg ctgtacagag cttaacgtaa actccctggc aagacctcct ttctgatttt    1320

agaaaggcca gcttattggt ttggttcctg taatagctta aaaatagaat ccagctgtat    1380

caggaaacat ttaaaaaatg tatcaaggaa gacctataac agtaaaaata ttttaaatc    1440
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atgacttcag tctgttcggt ggaaatgact ctgatgtcat aaactgactc ggcttcgctg    1620

acaggaaagt cgtacagaag aaaagctgtt cgagcccata tgttggttgc gctcaatgtc    1680

aggaagggc gacgtaatgt gtgcagaaat gggcagctgt cgagagtgaa gaaattggga    1740

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agaagagaag ggccggctgc tgtccctatc ctggtggcgg aaccacttag aaacaaggcg    1860

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aactctggta agtttgagat tgatcccagg ggtcgtggga tggagcctcg catgagactc    1980

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt
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MON-0301.ST25.txt

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MON-0301.ST25.txt
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Ser Leu Pro Gly Asp Tyr Leu Leu Ala Gly Leu Phe Pro Leu His Ser
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Asp Cys Pro Gly Val Arg His Arg Pro Thr Val Thr Leu Cys Asp Arg
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Pro Asp Ser Phe Asn Gly His Gly Tyr His Leu Phe Gln Ala Met Arg
65   70   75   80

Phe Gly Ile Glu Glu Ile Asn Asn Ser Thr Ala Leu Leu Pro Asn Val
            85   90   95

Thr Leu Gly Tyr Gln Leu Tyr Asp Val Cys Ser Glu Ser Ala Asn Val
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Tyr Ala Thr Leu Asn Val Leu Ser Leu Leu Gly Thr His His Val Glu
        115   120   125

Ile Arg Ala Asp Pro Ser His Tyr Ser Pro Ala Ala Leu Ala Val Ile
    130   135   140

Gly Pro Asp Thr Thr Asn His Ala Ala Thr Thr Ala Ala Leu Leu Ser
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Pro Phe Leu Val Pro Leu Ile Ser Tyr Glu Ala Ser Ser Val Thr Leu
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Gly Val Lys Arg His Tyr Pro Ser Phe Leu Arg Thr Ile Pro Ser Asp
        180   185   190

Lys His Gln Val Glu Ala Met Val Leu Leu Leu Gln Ser Phe Gly Trp
        195   200   205

Val Trp Ile Ser Val Val Gly Ser Asp Gly Asp Tyr Gly Gln Leu Gly
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Val Gln Ala Leu Glu Glu Gln Ala Thr Gln Gln Gly Ile Cys Val Ala
225   230   235   240

Phe Lys Asp Ile Ile Pro Phe Ser Ala Arg Pro Gly Asp Glu Arg Met
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Gln Ser Ile Met His His Leu Ala Arg Ala Arg Thr Thr Val Val Val

MON-0301.ST25.txt
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```
Phe Glu Glu Ala Tyr Val Gln Ala Asp Lys Gly Ala Pro Gly Pro Cys
                340                 345                 350
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Ala Phe Thr Ala Glu Gln Met Pro Thr Leu Gly Ala Phe Ser Met Ser
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Ser Ala Tyr Asn Ala Tyr Arg Ala Val Tyr Ala Val Ala His Gly Leu
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His Gln Leu Leu Gly Cys Ala Ser Gly Ala Cys Ser Arg Asp Arg Val
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His Lys Asp Thr Val Arg Phe Asn Asp Asn Gly Asp Pro Leu Ser Gly
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Tyr Asp Ile Ile Ala Trp Asp Trp Ser Gly Pro Lys Trp Asn Phe Arg
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Val Ile Gly Ser Ser Met Trp Pro Pro Val Gln Leu Asp Ile Asn Lys
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Thr Lys Ile Arg Trp His Gly Lys Asp Asn Gln Val Pro Lys Ser Val
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Tyr His Cys Cys Phe Glu Cys Val Pro Cys Glu Ala Gly Ser Phe Leu
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MON-0301.ST25.txt

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Asp Thr Pro Val Val Lys Ser Ala Gly Gly Arg Leu Cys Phe Phe Met
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Leu Gly Ser Leu Ala Gly Gly Ser Cys Gly Leu Tyr Gly Phe Phe Gly
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Glu Pro Thr Leu Pro Thr Cys Leu Leu Arg Gln Ser Leu Leu Ala Leu
625             630             635             640


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Val Phe Ile Phe Lys Phe Ser Ala Lys Val Pro Thr Phe Tyr Arg Ala
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Trp Val Gln Asn His Gly Pro Gly Leu Phe Val Val Ile Ser Ser Met
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Ala Gln Leu Leu Ile Cys Leu Thr Trp Leu Ala Val Trp Thr Pro Leu
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Pro Thr Arg Glu Tyr Gln Arg Phe Pro Gln Leu Val Val Leu Asp Cys
705             710             715             720


Thr Glu Ala Asn Ser Pro Gly Phe Met Leu Ala Phe Ala Tyr Asn Gly
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Leu Leu Ser Val Ser Ala Phe Ala Cys Ser Tyr Leu Gly Lys Asp Leu
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Pro Glu Asn Tyr Asn Glu Ala Lys Cys Val Thr Phe Ser Leu Leu Leu
    755             760             765


Asn Phe Val Ser Trp Ile Ala Phe Phe Thr Thr Ala Ser Val Tyr Gln
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Gly Lys Tyr Leu Pro Ala Val Asn Val Leu Ala Ala Leu Ser Ser Leu
785             790             795             800


Ser Gly Gly Phe Ser Gly Tyr Phe Leu Pro Lys Cys Tyr Val Ile Leu
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Cys Arg Pro Lys Phe Asn Ser Thr Gln His Phe Gln Ala Ser Ile Gln
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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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MON-0301.ST25.txt

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Lys Met Val Asp Val Ser Tyr Ile Ser Asn Asn Val Gln Pro Val Leu
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Asp Arg Pro Ala Gly Gly Asp Thr Cys Ile Ala Phe Arg Glu Thr Leu
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Pro Met Pro Gln Pro Asn Gln Ala Val Thr Gln Trp Glu Arg Arg Arg
                245                 250                 255

Leu Lys Ala Ile Val Asp Glu Gln Gln Arg Gln Ser Ser Ala Arg Val
        260                 265                 270

Val Val Leu Leu Ser Pro Lys Leu Val Leu His Asn Phe Phe Arg Glu
        275                 280                 285

Val Leu Arg Gln Asn Leu Thr Gly Val Val Arg Ile Ala Ser Glu Ser
        290                 295                 300

Trp Ala Ile Asp Pro Val Leu His Asp Arg Pro Thr Arg Cys Thr Ala
305                 310                 315                 320

Ser Trp Ala Ala Pro Arg Pro Ala Ala Pro Gly Arg Leu Ser Leu Ala
                325                 330                 335

Gly Glu Ala Pro Pro Thr Glu Ser Arg Gly His Thr Arg Arg Arg Arg
                340                 345                 350

His Ser Pro Glu Trp Leu Pro Trp Arg Pro Leu Pro Cys Ser Ser Val
        355                 360                 365

Pro Leu Ser Gly Arg Val Leu Gly Lys Leu Ala Gly Glu Ala Arg Gly
        370                 375                 380

Arg Thr Leu Ser Pro Asp Thr
385                 390


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<212>   DNA
<213>   Artificial Sequence

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<223>   Synthetic Construct

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<212>   DNA
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<220>
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<220>
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<212>   DNA
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<400>   73
agctaacacg ctgctgctgc tgct                                          24


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<212>   DNA
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<220>
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<400>   74
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<210>   76
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MON-0301.ST25.txt

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<400>  78
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<210>  79
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<210>  81
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<223> Synthetic Construct

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<400> 87
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<210> 88
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<212> DNA
<213> Artificial Sequence

<220>
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<400> 88
actcactgaa gcccgggatg ggca   24

<210> 89
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MON-0301.ST25.txt

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<400>  90
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<400>  91
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<400>  93
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<210>   96
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<400>   96
gggcakgtag tggctgtagt c                                                    21


<210>   97
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<400>   97
ggctacaacc tsatgcaggc ca                                                   22


<210>   98
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<400>   98
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ctgggtgggc tcttccctct gggctctgcc gagggtacag gtcttggcga cgggctgcag      180

cccaatgcca ccgtgtgcac caggttctcg tctctgggcc tgctctgggc gctggccgtg      240

aagatggcgg tggaggagat caacaacggg tcggccctgc tgcccgggct gcacctgggc      300

tatgacctct ttgacacgtg ttcagagccc atggtggcca tgaagcccag cctcgtgttc      360

atggccaaag caggcagctg cagcattgcc gcctactgca attacacaca gtaccagccc      420

cgcgtgctgg ccgtcatcgg gccccactcg tctgagctcg ccctcgtcac cggcaagttc      480

ttcagcttct ccttgtgcc tcaggtcagc tacggcgcca gcaccgaccg gctgagcaac      540
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gagtatggcc ggcagggcct gagcctcttc tccggcctgg ccagcgccag gggcatctgc    720

atcgcgcatg agggcctggt gccactgccg ccaggcagcc tgcggctggg cgccctacag    780

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cagtgctccc ggcagtgcaa ggaaggccag gtgcgccgcg tgaagggctt ccactcttgc   1560

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gtgacctcac cgcagtga                                                  2598
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